

## Proposed Comal Extension

### Proposal for LOWINDEX and HIGHINDEX

#### Purpose

To allow the user to find the dimensions of an array without having to know what the DIM statement specified. This is especially useful in a procedure or function so that the dimensions of arrays does not need to be passed as parameters and so the clarity of the program is improved.

#### Syntax

LOWINDEX (<array name> [,<numeric expression>])

HIGHINDEX (<array name> [,<numeric expression>])

#### Semantics

The function LOWINDEX takes an array name specified in the same manner as that passed to procedures and functions (e.g. A(,)).

The numeric expression allows selection of which dimension to return. This can default to 1 for ease of use. If this expression exceeds the number of dimensions in the array, then an error occurs.

HIGHINDEX is the equivalent function for finding the high index of an array.

#### Examples

DIM A(-5:20,12)

DIM A\$(20)

*LOW*  
PRINT LOWINDEX(A(,),1) returns -5

*HIGH*  
PRINT HIGHINDEX(A(,),2) returns 12

PRINT HIGHINDEX(A\$()) returns 20